

CAMBRIA IRON COMPANY, BLACKSMITH SHOP
(Bethlehem Steel Company, Blacksmith Shop)
Cambria Iron Works
Lower Works
Johnstown
Cambria County
Pennsylvania

HAER No. PA-109-A

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135A-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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Historic American Engineering Record
National Park Service
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HISTORIC AMERICAN ENGINEERING RECORD
CAMBRIA IRON COMPANY, BLACKSMITH SHOP
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Location: Lower Works, Johnstown, Cambria
County, Pennsylvania

USGS Quad: Johnstown, Pennsylvania
(1:24000)
UTM: 17 E.676380 N.4466610

Date of Construction: ca. 1864

Fabricator: unknown

Present Owner: Bethlehem Steel Company

Present Use: Blacksmith Shop

Significance: The blacksmith shop is the earliest
surviving building of the Cambria
Iron Company. The shop produced a
wide range of metal products
throughout the nineteenth and early
twentieth centuries, and contains a
steam-powered Chambersburg forging
hammer, now converted to electric
power.

Historian: Gray Fitzsimons, ed.

Project Information:

The results of the study of Cambria County were published in
1990: Fitzsimons, Gray, editor, Blair County and Cambria County,
Pennsylvania: An Inventory of Historic Engineering and Industrial
Sites (Washington, D.C.: America's Industrial Heritage Project
(AIHP) and HABS/HAER, National Park Service). The contents of the
publication were transmitted to the Library of Congress as
individual reports. Research notes, field photos and copies of
historic photos collected during the project were transmitted to
the AIHP Collection, Special Collections, Stapleton Library,
Indiana University of Pennsylvania, Indiana, PA 15705.

HISTORY

The earliest surviving building of the Cambria Iron Company is the Blacksmith Shop, erected about 1864. (The date of construction of the Blacksmith Shop is generally given as 1854, however, based on site maps, an early birdseye view of the iron works, and the Cambria County Tax Assessment Records, it appears that the date is actually about 1864.) The Blacksmith Shop produced a wide range of metal products throughout the nineteenth and early twentieth centuries. It contained a variety of grinders and tools, as well as steam-powered hammers and coal-fired furnaces.

Two additions to the Blacksmith Shop were made between about 1870 and 1885. The first consisted of a one-and-a-half-story, brick building, adjoining the west side of the octagon. The second addition, a large, two-story, brick wing erected to the east was built to provide room for an additional steam hammer. Constructed about 1885, this addition, with matching arched windows, now contains an overhead crane and a steam-powered, five-ton W. H. Sellers hammer, manufactured in Philadelphia, and dating to about 1900. Another addition was made about 1900 when a one-story brick building with a sloping roof was erected along the southwest facade. This addition contained more forges and an overhead crane. Finally, in the 1920s, Bethlehem Steel built a two-story, brick structure off the south elevation to serve as a locker room and lavatory. At its peak in the late nineteenth and early twentieth century, the Blacksmith Shop employed nearly 100 men and ran two and three shifts.

The Blacksmith Shop continues to function in its original role; however, much of the metalwork is carried out in conjunction with materials testing. The most frequently used forging hammer in the shop, a Chambersburg hammer that was originally steam-powered, now operates with compressed air. There is also an electrically powered Chambersburg hammer. It is seldom used, however. All of the furnaces are fired with natural gas. Only a handful of men currently work in the shop.

The original (ca. 1864) building is an octagonally shaped one-story structure, with an octagonal cupola, containing heavy timbered roof trusses with iron tension rods, common-bond, red brick walls and pilasters, and measuring approximately 70' x 70'. An 1870s brick addition extends to the west, a ca. 1900 shop building extends to the south (connecting a two-story lavatory built of brick in the 1920s), and a one-story brick annex, built between 1884 and 1885 extends to the east. The Blacksmith Shop contains several forging hammers and furnaces.

SOURCES

Beer, D.G., Goodhue, J.H., and Roe, F.B. "Cambria County, Pennsylvania," (Philadelphia: A. Pomeroy, 1867).

Birdseye View of Cambria Ironworks, (labeled ca. 1860; probably dating from ca. 1867), on display at the Johnstown Flood Museum).

Cambria Iron Company. "Smith Shop Annex," original drawing (ca. 1884) in the possession of the Bethlehem Steel Corporation, Engineering Division, Johnstown.

Doran, T. "Plan of the Boroughs Johnstown and Conemaugh Together with Cambria Iron Works, Cambria, and Prospect, Cambria County, Pennsylvania," surveyed, drawn, and published by T. Doran, 1854.

Fritz, John. Autobiography of John Fritz. (New York: ASME, 1912).

Holley, A.L. and Smith, Lenox. "American Iron and Steel Works: Works of the Cambria Iron Company," Engineering: An Illustrated Weekly Journal, Vol. 26, (12 July 1878), 21-24.

"Key Plan, Johnstown Plants: February 16, 1923; revised January 26, 1927, March 29, 1930, and February 13, 1939," (copy available at the Canal Museum, Center for Canal History and Technology, Easton, Pennsylvania).

M'Cormick, S.B. "A Sketch of Johnstown and Suburbs; and the Cambria Iron Works." (Pittsburgh: Barr and Myers, n.d. [ca. 1867]) pp 11-15.

Sanborn Map Company, Johnstown, Pennsylvania. New York: Sanborn Map Co., 1891 and 1911.